

Amendments to the Specification

Please amend the specification as follows.

Insert the following heading and paragraph at line 6 on the page numbered 2.

-- CROSS REFERENCE TO RELATED APPLICATION

This application is a Divisional of copending U.S. Application No. 10/178-582, filed June 24, 2002, which is hereby incorporated by reference in its entirety. --

Replace the paragraph beginning at the third line on page 4 with the following amended paragraph.

-- Textured landing zones proved effective to a point[[,]]; however, the need to fly the slider 24 still lower, with the inevitable need to reduce contamination further, [[lead]] led to the development of techniques whereby the slider 24 is held off of the surface of the disk 16 when not in use. Such techniques seek to avoid any contact between the slider 24 and disk 16 at all. However, simply lifting the slider 24 higher off of the surface of the disk 16 is not sufficient because a system 10 in a portable computer system is subject to shock that can cause the slider 24 to slap into the disk 16. Therefore, a technique used in the prior art to securely park the slider 24 away from the surface of the disk 16, as shown in Figure 2, is to employ a small ramp 30 placed proximate to the outer diameter (OD) of the disk 16 and a tab 32 attached to the slider 24. As the voice-coil actuator 18 causes the slider 24 to move toward the extreme OD the tab 32 rides up on the ramp 30 and lifts the slider 24 away from the surface. The slider 24 is pushed still further along the ramp 30 past the OD of the disk 16 to be parked on a flat or slightly indented portion on the ramp 30. --

Replace the last paragraph on page 13 with the following amended paragraph:

-- Figure 13 shows a flow diagram [[of]] for the method of unloading the slider. --

Replace the paragraph beginning at the 13th line on page 14 with the following amended paragraph:

-- The first surface 44 is further divided into two sections, a straight segment 50 and a sloped segment 52, the sloped segment 52 being acutely angled with respect to the second [[surface46]] surface 46. The straight segment 50 is a location where a tab 32 rests when a slider 24 is parked. Although shown as flat in Figure 5, the straight segment 50 in other embodiments can be provided with a notch, a step, or a depression, for example, to more securely hold the tab 32 when the slider 24 is at rest. Such designs are well known in the art. The sloped segment 52 provides a transition region to guide the slider 24 towards the surface of the disk 16 during loading, and to gently bring the slider 24 away from the surface of the disk 16 when unloading. While the sloped segment 52 is shown in Figure 5 as being a flat section acutely angled with respect to the second surface 46, the sloped segment 52 take more complex forms in other embodiments. For example, the sloped segment 52 can be contoured so that towards one end it smoothly transitions into the straight segment 50 and on the other end it is flared to be more nearly parallel to the plane defined by the surface of the disk 16. --

Replace the three paragraphs running from the 15th line on page 15 to the 14th line on page 16 with the following three amended paragraphs:

-- Figure 6A shows a partially broken view of the ramp 40 taken along the line 6-6 of Figure 5 to illustrate various embodiments of apertures 48. In one embodiment, an aperture [[48']] 48' has a first opening [[54']] 54' at the first surface 44 and a second opening [[56']] 56' at the second surface 46. For this aperture [[48']] 48' the cross-sectional areas of the first opening [[54']] 54' and the second opening [[56']] 56' are substantially equal and the aperture [[48']] 48' between them is substantially straight and perpendicular to the second surface 46. Aperture [[48']] 48' represents the simplest type of aperture 48 and should be the easiest to manufacture, for example, by laser drilling.

Aperture 48'' shows a more complex aperture 48. Aperture [[48'']] 48'' differs from aperture [[48']] 48' in four ways: the cross-sectional area of the first opening [[54'']] 54'' is less than the cross-sectional area of the second opening [[56'']] 56'', the aperture [[48'']] 48'' is neither straight nor perpendicular to the second surface 46, and the first opening [[54'']] 54'' includes a nozzle region 55. Of course, other embodiments may be more complex than aperture [[48']] 48' while less complex than aperture [[48'']] 48''. For example, one embodiment of aperture 48 might

be straight with a cross-sectional area of the first opening 54 less than the cross-sectional area of the second opening 56 and not include a nozzle 55.

Non-linear apertures 48 can be used to bring an air flow from a second opening 56 situated over the surface of the disk 16 to a first opening 54 on the first surface 44 that is substantially distant from the OD of the disk 16. In order to provide a flow of air to the straight segment 50, for example, it may be necessary to direct the flow of air from second openings 56, located proximate to the OD of the disk 16, through a plurality of apertures 48 and to first openings 54 located on the straight segment 50. Aperture 48 in Figure 6A illustrates this configuration. Aperture 48 also illustrates a nozzle region 55 that is shaped to increase the speed of the air as it exits through the first opening 54. --

Amendments to the Drawings

The attached sheets of drawings (10 sheets) include changes to Figs. 8A, 8B, 10D, 11.

Sheet 6/10, which includes Figs. 7, 8A and 8B, replaces both the original sheet including Fig. 7 (not amended herein) and the original sheet including Figs. 8A and 8B. Fig. 8A is amended herein to insert lead lines and reference numerals -- 46 --, -- 73 -- and --75 --; Fig. 8B is amended herein to insert lead lines -- 73 -- and -- 75 --.

Sheet 8/10, which includes Figs. 10A, 10B, 10C and 10D, replaces the original sheet including Figs. 10A, 10B, 10C and 10D. Fig. 10D is amended herein to insert lead line and reference numeral -- 44 --.

Sheet 7/10, which includes Figs. 9 and 11, replaces both the original sheet including Fig. 9 (not amended herein) and the original sheet including Fig. 11. Fig. 11 is amended herein to insert lead lines -- 40 --, -- 44 --, -- 46 -- and -- 50 --.

Attachment: Replacement Sheets
Annotated Sheets Showing Changes